

- 3      the same anchored linear events used for all event data, resulting in dynamic
- 4      segmentation.

1                12. A method as recited in claim 7, wherein the linear event data comprises  
2      an event value; and an anchored linear event related to at least one anchorsection, the  
3      anchored linear event identifying start and end offsets of an anchor section.

1                13. A method as recited in 12, wherein jurisdictional areas are maintained  
2      as spatial data, the method further comprising:  
3                storing jurisdictional area polygons in the database;  
4                accessing event data for a jurisdictional area using a spatial query;  
5                identifying anchor sections contained within a specified jurisdictional area; and  
6                compiling event data for the identified anchor sections using a relational query.

1                14. A method as recited in claim 13, further comprising:  
2                summarizing anchor section event data using a summary query.

1                15. A method as recited in claim 13, further comprising:  
2                summarizing anchor section event data using a report query.

1                16. A method as recited in claim 13, further comprising:  
2                pre-processing spatial queries for desired jurisdictional areas; and

3        storing results of the pre-processed spatial queries for desired jurisdictional  
4        areas in a location accessible by a query program, resulting in more efficient access to  
5        event tables stored by the pre-processing queries.

1        17.      A method as recited in claim 7, further comprising:  
2            importing road network data in the form of a link-node network by adding  
3            additional table columns required to maintain consistency of the link node network  
4            with a spatial data engine for the road network data, the adding further comprising:  
5            creating an entry in an anchor section table for each link in the imported road  
6            network link table;  
7            assigning an anchor section identifier (ID) to the entry;  
8            copying associated spatial data from the imported data into the spatial data  
9            engine road network data; and  
10          copying other data associated with the link to define the road network.

1        18.      A method as recited in claim 7, further comprising:  
2            presenting data as tabular query results and reports.

1        19.      A method as recited in claim 7, further comprising:  
2            using standard geographic information system (GIS) tools to produce maps  
3            using data in the road network.

1        20. A method as recited in claim 7, further comprising:  
2              locking data for a desired periods of time while new data is collected.

1        21. A method as recited in claim 7, further comprising:  
2              querying data in the road network by a combination of spatial and linear  
3              attributes.

1        22. A method as recited in claim 21, wherein the querying further  
2              comprises:  
3              using one of a spatial query based on a temporary area defined via a map  
4              interface or a relational query based on jurisdictional areas; and  
5              filtering results of the query based on event data associated with anchor  
6              sections in an area of interest as defined by the query.

1        23. A method as recited in claim 21, further comprising:  
2              summarizing event values for the associated anchor sections.

1        24. A method as recited in claim 21, further comprising:  
2              mapping the associated anchor sections.

1        25. A method as recited in claim 21, wherein the querying launches at least  
2              one distributed application to retrieve data from a distributed network of databases.